

I claim:

1. An anchor installation apparatus, comprising:
a first elongated hollow element having a closed upper end, an open lower
5 end, and a transverse cross section;
a two-way flow valve located on said first elongated hollow element;
a second elongated hollow element having an open upper end, an open lower
end, and a transverse cross section substantially the same as that of said
first hollow element; and
10 a pipe end to pipe end connector for releasably connecting said open lower end
of said first elongated hollow element to said open upper end of said
second elongated hollow element.
2. The apparatus of claim 1, further comprising an attachment device fixed to the
outer surface of said second elongated hollow element.
3. The apparatus of claim 1, further comprising a plurality of two-way flow
valves located on said first elongated hollow element.
4. The apparatus of claim 3, wherein said two-way flow valves are attached to
said closed upper end of said first elongated hollow element, said valves
adapted to regulate the flow of fluid from one side of said closed upper end to
the other side of said closed upper end of said first elongated hollow element.
5. The apparatus of claim 4, wherein said first and second elongated hollow
elements have a cylindrical transverse cross-section.
6. The apparatus of claim 5, wherein said pipe end to pipe end connector is
selected from the group consisting of a gravity connector, a threaded screwed
connector, and a mechanical connector.

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7. The apparatus of claim 6, wherein said pipe end to pipe end connector is selected from the group consisting of a slip joint, a stabbing guide, a mechanical latch, a coupling, a threaded pipe and a steel cable.
8. The apparatus of claim 5, wherein said first elongated hollow element, said second elongated hollow element, or both further include a longitudinal vane protruding from the outer surface of said tubular element.
9. A method for installing an anchor, comprising:
installing an anchor installation system at least partially into the floor of a body of water, said anchor installation system including (i) a first elongated hollow element having a closed upper end, an open lower end, and a transverse cross section, (ii) a second elongated hollow element anchor having an open upper end, and open lower end, and a transverse cross section substantially the same as that of said first elongated hollow element, (iii) a pipe end to pipe end connector for releasably connecting said open lower end of said first elongated hollow element to said open upper end of said second elongated hollow element and (iv) a two-way flow valve located on said first elongated hollow element; and
releasing said first elongated hollow element from said second elongated hollow element.
10. The method of claim 14, wherein said installation step includes said anchor installation system further including a plurality of two-way flow valves located on said first elongated hollow element.
11. The method of claim 10, wherein said installation step comprises self-weight penetration.

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12. The method of claim 10, wherein said installation step comprises applying a direct force to said anchor.
13. The method of claim 10, wherein said installation step comprises suction penetration.
14. The method of claim 10, further including retrieving said first elongated hollow element.
15. The method of claim 10, wherein said installation step includes said anchor installation system further including (v) an attachment device fixed to the outer surface of said second elongated hollow element anchor.
16. The method of claim 15, wherein said valves are attached to said closed upper end of said first elongated hollow element.
17. The method of claim 16, wherein said installation step includes said anchor installation system wherein said first and said second elongated hollow elements have a cylindrical transverse cross-section.
18. The method of claim 17, wherein said installation step includes said anchor installation system wherein said pipe end to pipe end connector is selected from the group consisting of a gravity connector, a threaded screwed connector, and a mechanical connector.
19. The method of claim 18, wherein said installation step includes said anchor installation system wherein said pipe end to pipe end connector is selected from the group consisting of a slip joint, a stabbing guide, a mechanical latch, a coupling, a threaded pipe and a steel cable.
20. The method of claim 10, wherein said installation step further includes:

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- a) positioning said anchor installation system at an inclined angle with respect to the sea floor, the top of said anchor installation system being inclined in a direction away from the direction of a lateral loading; and
- 5 b) inserting said anchor installation system at least partially into said sea floor, said anchor installation system substantially maintaining said inclined angle.
21. The method of claim 10, wherein said installation step includes said anchor installation system wherein said first elongated hollow element, said second
- 10 elongated hollow element, or both further include a longitudinal vane protruding from the outer surface of said elongated hollow element(s).
22. A method for installing an anchor, comprising:
installing an anchor installation system at least partially into the floor of a body of water, said anchor installation system including (i) a first elongated hollow element having a closed upper end, an open lower
- 5 end, and a transverse cross section, (ii) a second elongated hollow element anchor having an open upper end, open lower end, and a transverse cross section substantially the same as that of said first elongated hollow element, (iii) means for releasably connecting said open lower end of said first elongated hollow element to said open
- 10 upper end of said second elongated hollow element anchor, and (iv) a two-way flow valve located on said first elongated hollow element; and releasing said first elongated hollow element from said second elongated hollow element anchor.
23. The method of claim 22, wherein said installation step includes said anchor installation system further including a plurality of two-way flow valves located on said first elongated hollow element.

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24. The method of claim 23, wherein said installation step comprises self-weight
5 penetration.
25. The method of claim 23, wherein said installation step comprises applying a
direct force to said anchor installation system.
26. The method of claim 23, wherein said installation step comprises suction
penetration.
27. The method of claim 23, further including retrieving said first elongated
hollow element.
28. The method of claim 23, wherein said installation step includes said anchor
installation system wherein said first and said second elongated hollow
elements have a cylindrical transverse cross-section.
29. The method of claim 28, wherein said installation step further includes:
- a) positioning said anchor installation system at an inclined angle with
respect to the sea floor, the top of said anchor installation system being
inclined in a direction away from the direction of a lateral loading; and
 - 5 b) inserting said anchor installation system at least partially into said sea
floor, said anchor installation system substantially maintaining said
inclined angle.
30. The method of claim 28, wherein said installation step includes said anchor
installation system wherein said first elongated hollow element, said second
elongated hollow element, or both further include a longitudinal vane
protruding from the outer surface of said elongated hollow element(s).

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31. The method of claim 23, wherein said plurality of valves are attached to said closed upper end of said first elongated hollow element.
32. The method of claim 31, wherein said installation step includes said anchor installation system further including (v) load transfer means fixed to the outer surface of said second elongated hollow element anchor.
33. An anchor installation apparatus for use in installing an elongated hollow element into the floor of a body of water, comprising:
a first elongated hollow element having a closed upper end, an open lower end, and a transverse cross section;
5 a two-way flow valve located on said first elongated hollow element;
a second elongated hollow element having an open upper end, an open lower end, and a transverse cross section substantially the same as that of said first elongated hollow element; and
means for releasably connecting said open lower end of said first elongated
10 hollow element to said open upper end of said second elongated hollow element.
34. The apparatus of claim 33, further comprising a plurality of two-way flow valves located on said first elongated hollow element.
35. The apparatus of claim 34, further including load transfer means fixed to the outer surface of said second elongated hollow element.
36. The apparatus of claim 35, wherein said plurality of valves are attached to said closed upper end of said first elongated hollow element, said valves adapted to regulate the flow of fluid from one side of said closed upper end to the other side of said closed upper end of said first elongated hollow element.

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37. The apparatus of claim 36, wherein said first and said second elongated hollow elements have a cylindrical transverse cross-section.
38. The apparatus of claim 37, wherein said first elongated hollow element, said second elongated hollow element, or both further include a longitudinal vane protruding from the outer surface of said elongated hollow element(s).
39. A method of producing offshore hydrocarbon resources, comprising:
- a) anchoring an offshore structure to the seabed through use of an anchor installation system, said anchor installation system including (i) a first elongated hollow element having a closed upper end, an open lower end, and a transverse cross section, (ii) a second elongated hollow element having an open upper end, and open lower end, and a transverse cross section substantially the same as that of said first elongated hollow element, (iii) a load transfer device fixed to the outer surface of said second elongated hollow element, (iv) a pipe end to pipe end connector for releasably connecting said open lower end of said first elongated hollow element to said open upper end of said second elongated hollow element and (iv) a two-way flow valve located on said first elongated hollow element;
 - b) releasing said first elongated hollow element from said second elongated hollow element;
 - c) connecting said load transfer device to an offshore structure; and
 - d) producing hydrocarbon resources.
40. The method of claim 39, further comprising (e) transporting said hydrocarbon resources to shore.